

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Division - Watershed Management Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: MOUNTAIN LAKE	Lake Area (ha): 4.98
Town: BROOKFIELD	Maximum depth (m): 2.1
County: Carroll	Mean depth (m): 0.8
River Basin: Coastal	Volume (m ³): 41500
Latitude: 43°31'38" N	Relative depth: 0.8
Longitude: 71°05'43" W	Shore configuration: 1.37
Elevation (ft): 928	Areal water load (m/yr): 24.32
Shore length (m): 1080	Flushing rate (yr ⁻¹): 29.10
Watershed area (ha): 238.7	P retention coeff.: 0.46
% watershed ponded: 0.0	Lake type: artificial

BIOLOGICAL:

		24 January 2002	16 July 2001
DOM. PHYTOPLANKTON (% TOTAL)	#1	DINOBRYON 90%	CHRYSPHAERELLA 60%
	#2		DINOBRYON 30%
	#3		ELAKATOTHRIX 8%
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			6.40
DOM. ZOOPLANKTON (% TOTAL)	#1	KERATELLA 70%	POLYARTHRA 34%
	#2	POLYARTHRA 14%	NAUPLIUS LARVA 23%
	#3	CHROMOGASTER 11%	BOSMINA 13%
ROTIFERS/LITER		1173	771
MICROCRUSTACEA/LITER		68	640
ZOOPLANKTON ABUNDANCE (#/L)		1241	1763
VASCULAR PLANT ABUNDANCE			Scattered
SECCHI DISK TRANSPARENCY (m)			2.0 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)		6.7	5.0
BACTERIA (E. coli, #/100 ml)	#1		< 1
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None
Hypolimnion volume (m³) : None
Anoxic volume (m³) : None

CHEMICAL:

Lake: MOUNTAIN LAKE

Town: BROOKFIELD

	24 January 2002		16 July 2001		
DEPTH (m)	1.0		1.0		
pH (units)	6.5		7.0		
A.N.C. (Alkalinity)	13.8		12.9		
NITRATE NITROGEN	0.06		< 0.05		
TOTAL KJELDAHL NITROGEN	0.30		0.40		
TOTAL PHOSPHORUS	0.015		0.013		
CONDUCTIVITY (µmhos/cm)	54.0		40.4		
APPARENT COLOR (cpu)	23		47		
MAGNESIUM			0.70		
CALCIUM			4.7		
SODIUM			1.8		
POTASSIUM			< 0.40		
CHLORIDE	< 3		< 2		
SULFATE	5		4		
TN : TP	24		31		
CALCITE SATURATION INDEX			2.5		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 2001

D.O. S.D. PLANT CHL TOTAL CLASS

**	3	1	1	5	Meso.
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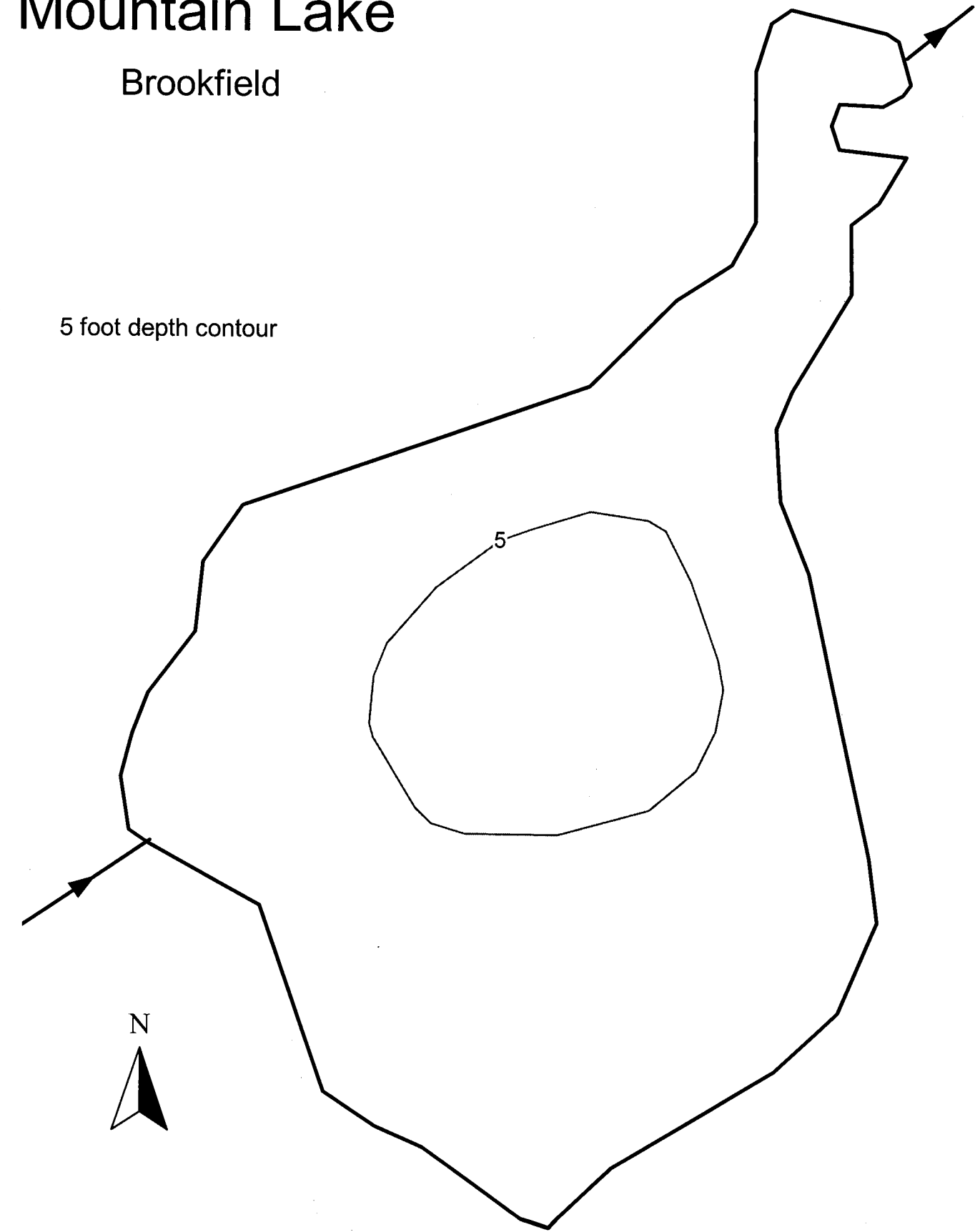
COMMENTS:

1. This pond was drained (beaver dam removed) in the fall of 1992 to control Eurasian water milfoil. It remained in a drained state until a new concrete dam was constructed in 1999/2000/ The pond was returned to full pool in the summer of 2000.
2. The pond and surrounding area is a natural conservation area managed by the NH Fish & Game Department as part of the Jones Brook Wildlife Management Area.
3. Access is via a locked, gated road; gate is approximately ½ mile from the pond.

Mountain Lake

Brookfield

5 foot depth contour



[illegible]

TOWN: BROOKFIELD
WEATHER: Warm & partly cloudy

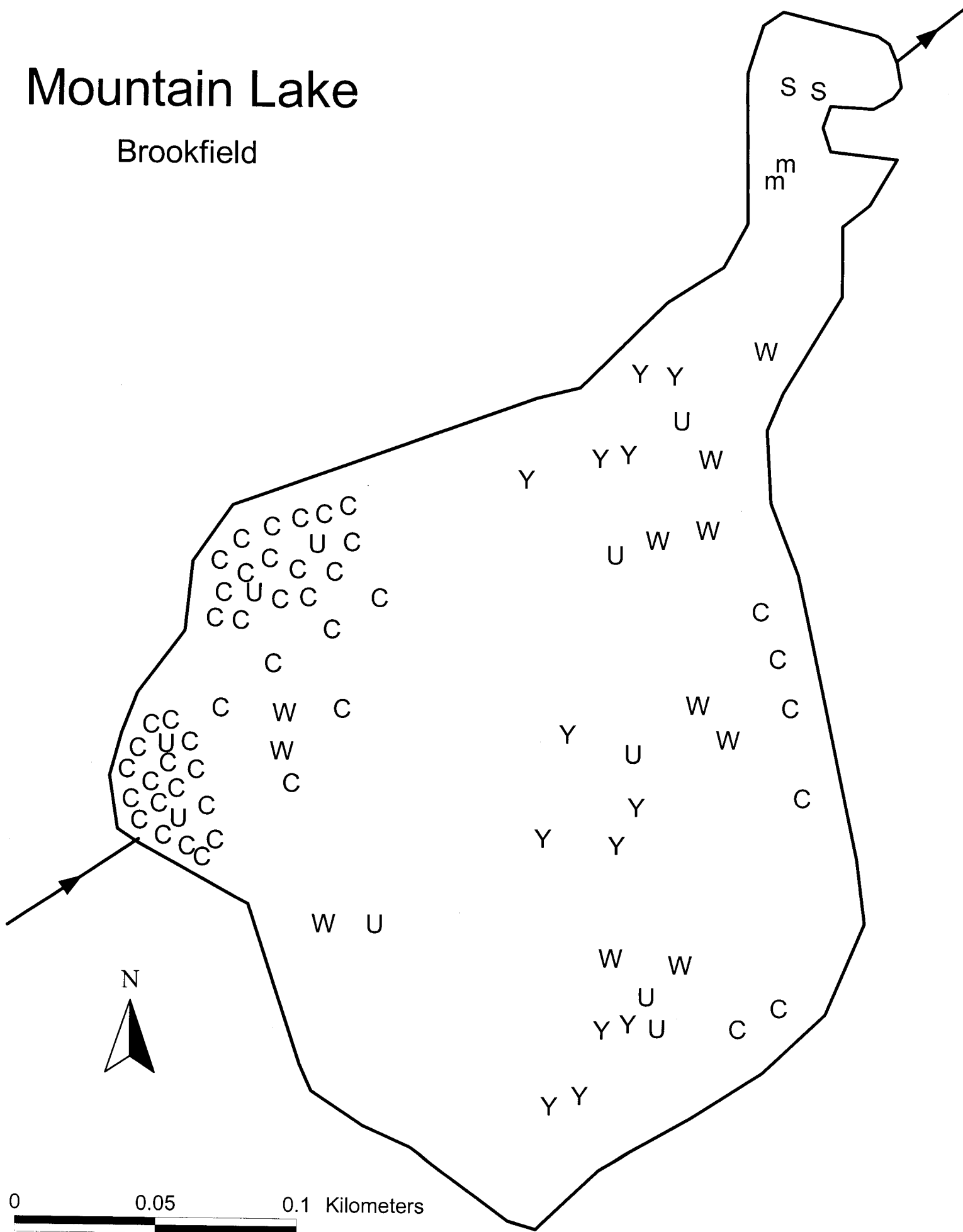
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SECCHI DISK (m):    2.0 VOB      COMMENTS:
BOTTOM DEPTH (m):   2.1
TIME: 1030
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*Dissolved oxygen values are in mg/L

Mountain Lake

Brookfield



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